

L 19692-65

ACCESSION NR: AP5000611

signal reception. Radiation from each source was recorded simultaneously at 20, 25, 31, and 38.5 Mc. Recorder time constant was nearly 30 sec. Cassiopeia-A was used as a standard source of radiation. No discontinuity of the spectrum was noted for sources situated within the angles $151^\circ < l^{\text{II}} < 200^\circ$, and $-13^\circ < b^{\text{II}} < 60^\circ$. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Instytut radiofizyky i elektroniky AN URSR (Institute of Radio Physics and Electronics, AN UkrSSR)

SUBMITTED: 27Mar64

ENCL: 00

SUB CODE: AA, EC

NO REF SOV: 004

OTHER: 006

ATD PRESS: 3161

Card 2/2

BRAUDE, S. Ya.; VAYNSHTEIN, Z. V.

Distribution of thermal and nonthermal radiation components over
the galactic disc. Izv. vys. ucheb. zav. radiofiz. 7 no.2v196-301
'64 (MIRA 18c1)

i. Institut radiofiziki i elektroniki AN UkrSSR.

ГАРІЧАН, Лев, МРАДІК, Г. Г., САМІДІЕВ, В. В., КРУПІК, В. В., МІНІСІЕВ,
СОДІК, І. С.

Study of the spectra of discrete cosmic radio emission sources at
frequencies below 40 Mc. Tsvetn. zhur. 42 no. 3, p. 612-626. My. 1955.
(MIRA 1845)
L. Institut radiofiziki i elektronika (N Karabli).

L-38112-65 RBU/LMII/1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28
ACCESSION NR: AP5006015

S/0141/64/007/006/1032/1040

AUTHOR: Braude, S. Ya.; Vaysberg, V. V.

TITLE: Low frequency spectrum of cosmic radio emission

SOURCE: IAUZ. Radiofizika, v. 7, no. 6, 1964, 1032-1040

TOPIC TAGS: cosmic radio emission, galactic disc, galactic halo, synchrotron radiation, radio emission spectrum, ionized hydrogen

ABSTRACT: This is a continuation of an earlier paper (Izv. vyssh. uch. zav. - Radiofizika, v. 7, 193, 1964) dealing with a multi-layer model of a galactic disc consisting of alternating layers of synchrotron radiation and absorption in HII. Since the earlier calculations were made without account of the radio-emission from the halo, the authors check in the present article the applicability of the multi-layer model if the emission from the halo is also taken into account. The particular form of the model is considered in which it is assumed that the thermal and nonthermal components are thoroughly mixed in the disc. The low-frequency spectrum of cosmic radio emission ($\nu < 10^4 \text{ cps}$) is regarded as the result of emission of synchrotron radiation from the halo in the ionized hydrogen of the galaxy.

Card 1/3

L 38119-59

ACCESSION NR: AP5006015

disc. The model is such that the emission measure (ME) is unequal along different lines of sight, even though the HII filling the galactic disc forms a single layer. Owing to the uneven distribution of the HII in the disc, it is expected that the ME (which characterizes the degree of absorption) in a given direction would deviate from that in other directions in accordance with a random law (within the directivity pattern of the radio telescope). Within the framework of this model it is shown that the radiation flux can fluctuate greatly in such a model. Experiments aimed at checking these results should provide for elimination of fluctuations of ionospheric origin, by receiving the cosmic background outside the limits of the ionosphere. Such measurements at low frequencies are now feasible. Estimates show that the fluctuations in the radiation flux can reach 37% of the radio emission from the halo. Estimates of the electron density, determined from the average emission measure, agree with those obtained by the authors previously and by others. It is therefore concluded that the proposed model can explain earlier measurements of the low-frequency spectrum of galactic radio emission without resorting to the hypothesis that the radio emission from the outer part of the radio source experiences a break. Urg. att., answ., figures, 17 formulas, 1 table.

Card 2/3

L38119-65

ACCESSION NR: AP5006015 /

ASSOCIATION: Institut radiofiz'ki i elektroniki AN UkrSSR (Institute of Radio Physics and Electronics, AN UkrSSR)

SUBMITTED: 30Nov63

ENCL: 65

SUB CODE: AA

NR REF Sov: 008

OTHER: 011

ML
Card 3/3

L 58385-65 FBD/EWT(1)/ENG(v)/EEC-4/ERC(t)
ACCESSION NR: AP5015584

Pe-5/Pae-2/Pi-4 GN/WS-4

UR/0033/65/042/003/0618/0628
523.164.42

AUTHOR: Bazelyan, L. L.; Braude, S. Ya.; Vaysberg, V. V.; Krymkin, V. V.;
Men', A. V.; Sodin, L. G.

44
48
B

TITLE: Investigation of the spectra of discrete cosmic radio emission sources at frequencies below 40 Mc

SOURCE: Astronomicheskiy zhurnal, v. 42, no. 3, 1965, 618-628

TOPIC TAGS: cosmic radio emission, radio emission source, radio emission measurement, radio telescope

ABSTRACT: The spectra of 14 discrete sources (in the 20—40-Mc range) were investigated at the Radio Astronomy Observatory of the Institute of Radio Physics and Electronics, Academy of Sciences UkrSSR, from October 1963 through July 1964. All observations were made between 2200 and 0800 hours local time. The radio telescope employed an interferometer, and its antenna system consisted of two wideband multielement electrically phased arrays, each measuring 176 x 17 m and spaced 470 m apart on an east-west line. Each array consisted of 178 horizontal dipoles. Pattern width was 4° for 20 Mc and 2° for 40 Mc. Lobe width of the interference

Card 1/4

L 58385-65

ACCESSION NR: AF5015584

pattern was 1.6° for 20 Mc and 0.8° for 40 Mc. Beam declination along the meridian was regulated by remote-control delay lines. The telescope radiometers were phase modulated by phase shifting the signal of one of the antennas through 180° at a frequency of 60 cps. The signals of each antenna were amplified by hf preamplifiers. The passband of the preamplifiers and of the phase shifter was about 20 Mc. The adjustable passbands of the four radiometers made it possible to record each source at four frequencies simultaneously (20, 25, 30—31, and 38.5 Mc). The recordings were calibrated with a standard-signal generator fed through a calibrated attenuator and a splitter to the preamplifier inputs. All the sources were measured by comparing them with the standard flux of source 3C 461 (Cas-A), which at 20 Mc is $450 \times 10^{-24} \text{ w/m}^2 \text{ cps}$. Flux densities ($S \cdot 10^{24} \text{ w/Mc}$) and the mean probable errors ($\Delta\%$) for fourteen of the sources are listed in Table 1 of the Enclosure. On the basis of these and previous measurements of Cas-A, Signus-A, Virgo-A, and Taurus-A, the spectra of 18 discrete sources can be divided into two classes: spectra with a constant spectral index from 20 to 1400—3200 Mc (13 sources) and spectra with a spectral index which is a function of the frequency (5 sources). Orig. art. has: 3 figures and 2 tables.

[DW]

ASSOCIATION: Institut radiofiziki i elektroniki Akademii nauk UkrSSR (Institute of Radio Physics and Electronics, Academy of Sciences, UkrSSR)

Card 2/4

L 58385-65

ACCESSION NR: AP5015584

SUBMITTED: 13Sep64

ENCL: 01

SUB CODE: A, EC

NO REF Sov: 016

OTHER: 015

ATD PRESS: 4046

Card 3/4

VAYSBERG, Ya.D.

Horizontal spaces between underground utility installations.
Stroi. truboprov. 8 no.3:15-17 Mr '63. (MIRA 16:5)

1. Nachal'nik tekhnicheskogo otdela instituta Lengiproinzhstroyek,
Leningrad.
(Pipelines)

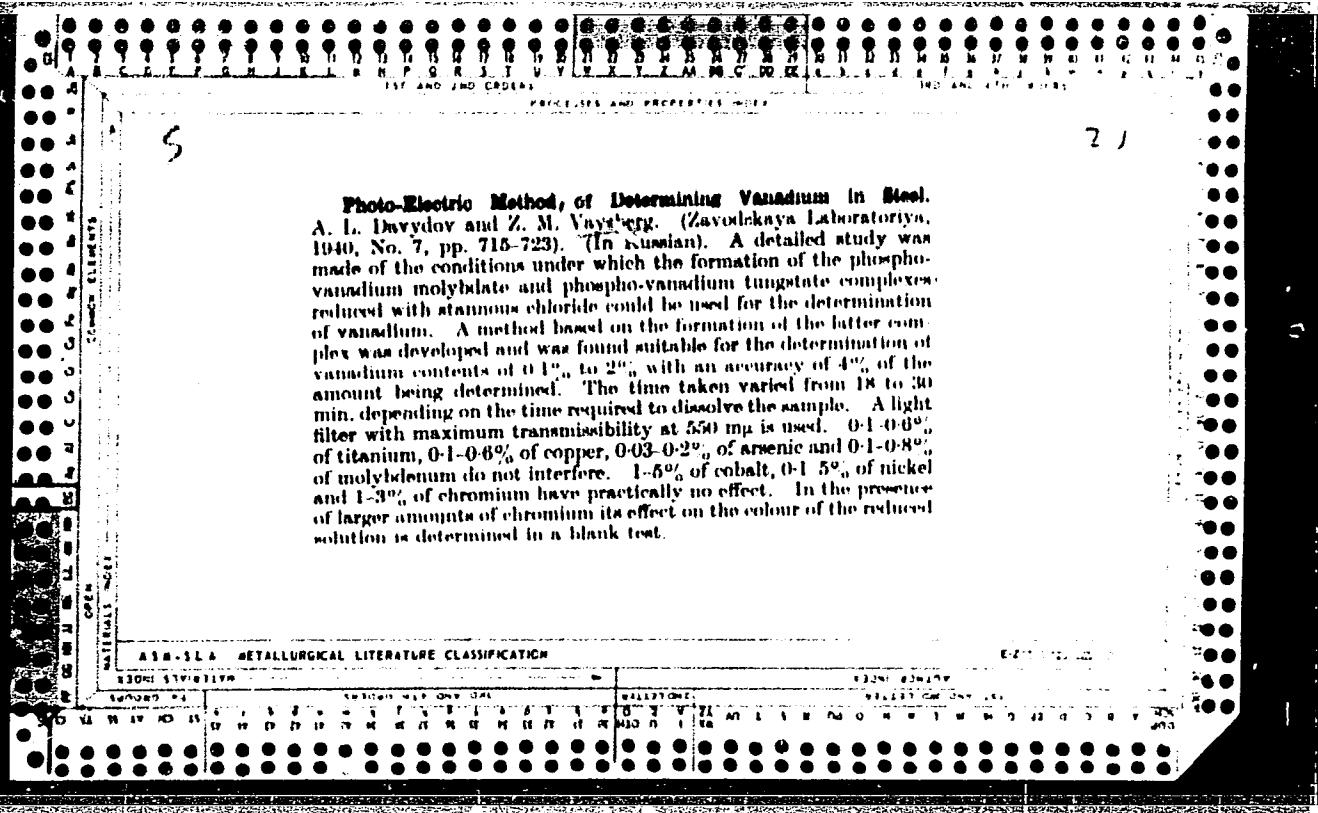
YAKOVLEV, A.T.; VAYSBERG, Ya.D.; GORSHKOV, V.A., red.

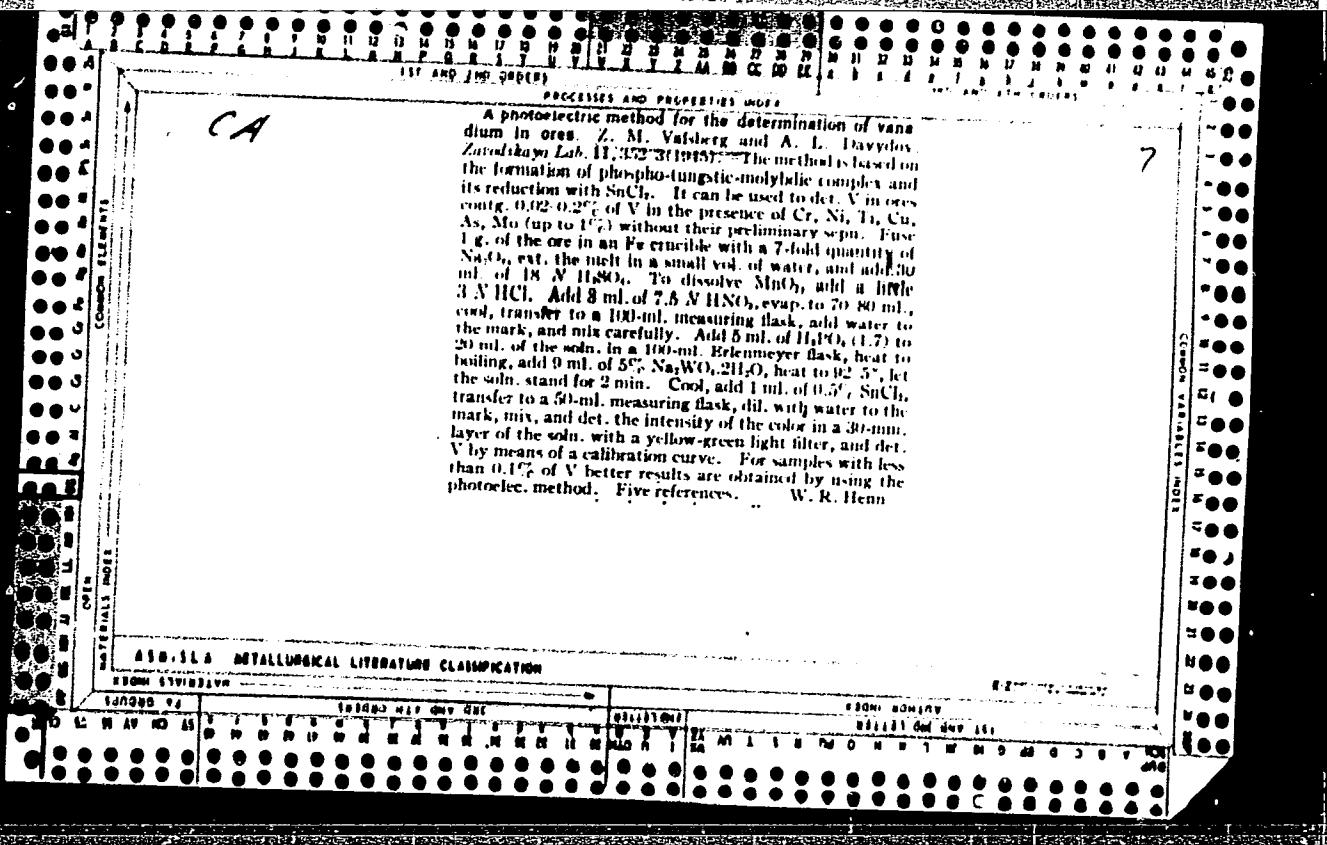
[Designing city gas mains] Proektirovanie gorodskikh
gazoprovodov. Moskva, Izd-vo M-va kommun.khoz.
RUFSR, 1963. 163 p. (MIRA 17:6)

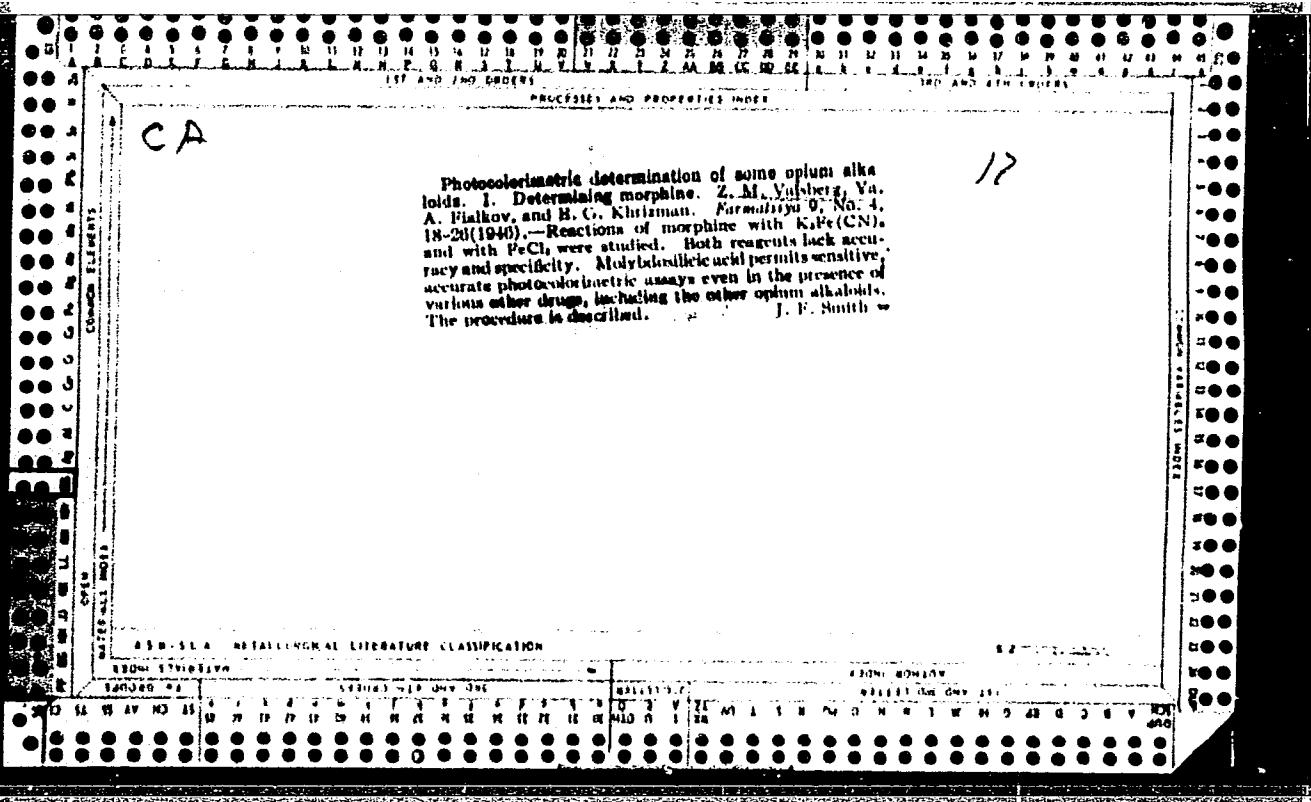
VAYSBERG, Ya.D. [deceased]

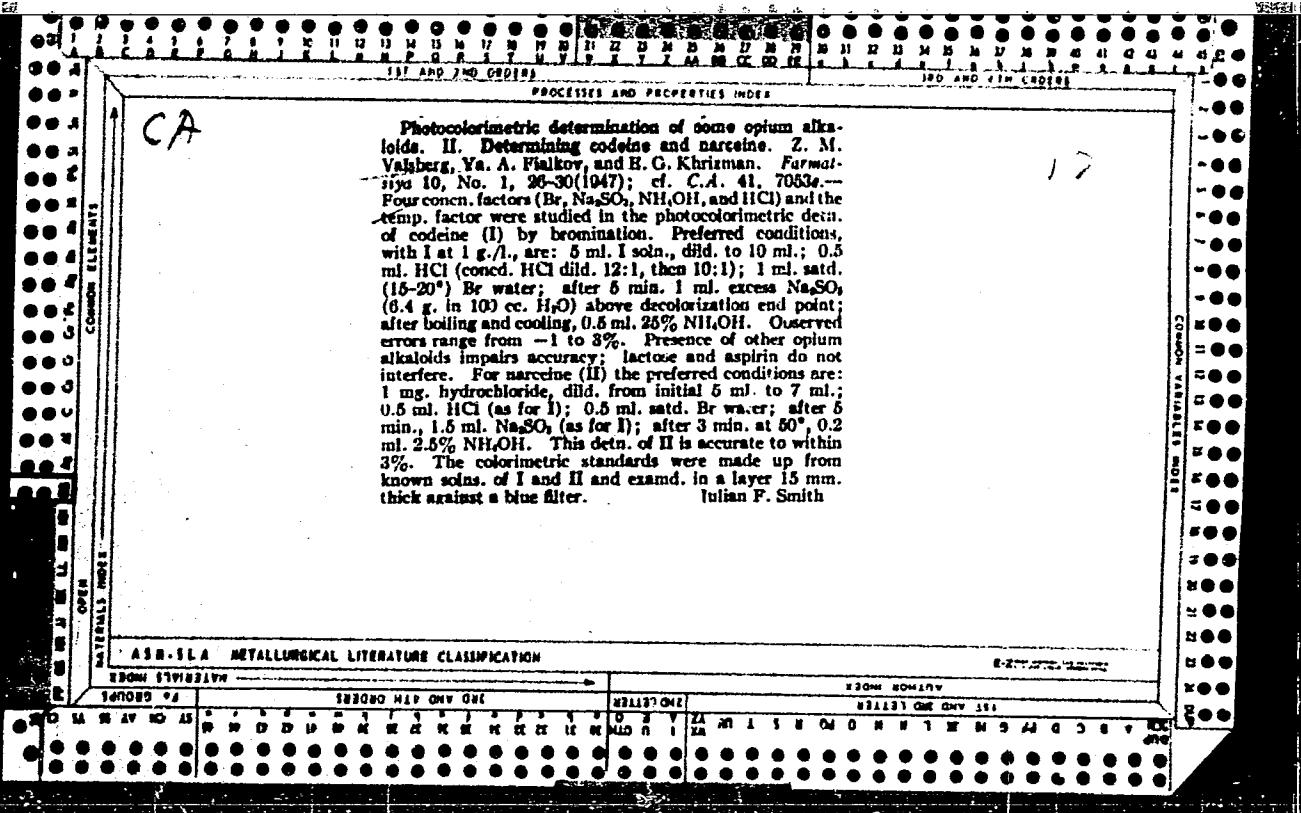
Giving up the hydraulic testing of gas pipelines after their placement on supports. Stroi. truboprov. 9 no.6:36-37 Je '64.
(MIRA 17:12)

1. Lengiproinzhproyekt, Leningrad.









Photometric method for determining columbium in steel. A. L. Davydov, Z. M. Valsberg, and I. E. Burkser. Zarodskaya Lab. 13, 1038-43(1947).—The blue complex of Cu with phosphomolybdate is most intense when the soln. is 0.4-0.7 N in H_2SO_4 ; the color is independent of the excess of $SnCl_2$ used; phosphate above 0.05 mg. does not affect the color intensity (below that, the color is weaker). The following procedure is recommended. Digest 0.1 g. of steel with 5 ml. of 8 N H_2SO_4 soln. and heat until dissolved. Add 0.2 ml. of concd. HNO_3 and 5 ml. of 2% HgP. Boil 10 min., dil. with 10 ml. of 8 N H_2SO_4 , and add 25 ml. H_2O . Make up to 50 ml. and transfer a 5-ml. aliquot to a 50-ml. volumetric flask, mix with 2 ml. Na_2HPO_4 soln. (0.6 g. per liter), 14 ml. water, and 4 ml. 2% $(NH_4)_2MoO_4$ soln. Heat to 30° and after 15 min. add 20 ml. of 6 N H_2SO_4 (to prevent reduction of molybdate). Wait 30 sec. and add 4 ml. 0.8% $SnCl_2$ soln. Dil. to 50 ml. and measure the color in a photometer against the standard. Mn, Cr, Ni, Si, and C do not affect the result which will agree within 0.01-0.02% of the truth.

O. M. Kowalewski

7

ASG-SEA METALLURGICAL LITERATURE CLASSIFICATION

12001-513

SOURCE #4

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

VAYSBERG, Z. M.

TA 9/49 T9

USSR/Chemistry - Tungstates, Reduction of Jun 48
Chemistry - Molybdates, Reduction of

"New Data on the Structure of Molybdenum and Tungsten Blue Derivatives," Z. M. Vaysberg, B. Ya. Dain, Inst of Phys Chem imeni L. V. Pisarzhevskiy, Acad Sci Ukrainian SSR, 5 3/4 pp

"Zhur Obshch Khim" Vol IVIII(LXXX), No 6

Prepares and investigates absorption spectra of molybdate and tungstate reduction products in presence of phosphorous, silicon, boron and arsenic salts. Compounds have various spectra and can be regarded as derivatives of molybdenum and tungsten blue. Submitted 28 Jan 1947.

9/49T9

AYSBERG, Z.M.; DAIN, B.Ya.

Chemical nature of the derivatives of molybdenum and tungsten blues.
Dop.AN URSR no.5:33-38 '49. (MLRA 9:9)

1.Institut fizichnoi khimii imeni L.V.Pisarzheva'kogo AN URSR Viddil
fotokhimii.Predstaviv diysniy chlen AN URSR O.I.Brods'kiy.
(Pigments)

VALSBERG, Z. M.

U.S.S.R. ✓The chemical nature and structure of the derivatives of molybdenum and tungsten blue. Z. M. Valsberg and B. Ya. Dafu. Izvest. Akad. Nauk S.S.R., Inst. Obshchei i Neorg. Khim. No. 26, 154-62 (1951).—By aid of a medium-sized Haiger spectrophotograph the ultraviolet absorption curves of phosphomolyhdic, silicomolyhdic, arsenomolyhdic, phosphotungstic, silicotungstic, phosphomolybdovanadic (I) acids, and the reduction products thereof, i.e. the various Mo and W blues, were plotted (200-450 m μ). Also the compds. were analyzed. The various blues showed only a slight increase in the percentage of the constituents; e.g.: I before and after reduction, resp., contained Mo 50.2 and 50.8, P 1.50 and 1.55, V 2.35 and 2.40%. As the spectral curves are very similar to one another (the absorptions almost always obey Lambert-Beer's law), it is concluded that the original compds. and the blues produced therefrom have very similar structures. Therefore it is proposed to call the blues "heteropoly acids of the reduced series." W. J.

VAYSSBERG, Z.M.

Spectra and photochemical properties of o,o'-dihydroxyazo dyes and their metal complexes. I. Acid chrome blue-black and its lacs. T. S. Glikman, B. F. Kutsaya, and Z. M. Vaysberg. *Ukrain. Khim. Zhurn.* 19, No. 301 (1953); *Referat. Zhar., Khim.* 1954, No. 10300. --Absorption spectra and photochem. properties of the dye and of its Cr, Cu, Fe, and Co salts were studied. For each atom of Cu or Fe there were 2 mols. of the dye, and for each atom of Cr or Co there were 3 mols. of the dye. The absorption spectra of the dye and of the salts were similar, but the max. in the spectra of the salts were displaced by 10-60 m μ toward the long-wave end. The absorption coeffs. of the salts were appreciably higher throughout the entire spectrum. Quanta yield of photodecompn. at λ 365 m μ were 4×10^{-4} for the dye, 2×10^{-4} for the Fe salt, 3×10^{-4} for Co salt, 5×10^{-4} for Cr salt, and 5×10^{-4} for Cu salt. M. Huseh

Inst. Phys. Chemistry im. Pisarenko, AS USSR

VAYSBERG, K.M.; ZIZIN, V.G.; Prinimali uchastiye: TRAVKINA, V.M.; SAFINA,
R.M.

Spectrographic determination of vanadium and nickel in petroleum
products. Zav.lab 26 no.10:1123-1124 '60. (MIRA 13:10)

1. Bashkirskiy nauchno-issledovatel'skiy institut po pereabotke
nefti.

(Vanadium--Spectra) (Nickel--Spectra)
(Petroleum products)

1. VAYSBERGER, A.
2. USSR (600)
4. Science
7. Physical methods in organic chemistry, Pod red. A. Vaysberger, Perev. s angl. Izd-vo inostr. lit-ry, Moskva, Vol. 2, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3

KUSTOV, B. J. and VAYSEBERGER, O. N.

"Problems of Economical Utilization of Coke Gas in the Soviet Union," (Hutnicke Listy, 1951, Vol. 6, Jan., pp 42-43. In Czech.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3"

VAYSBEYN, M., inzh.

Mechanical ventilation of grain in elevator silos. Muk.-elev.
prom. 25 no.8:20 Ag '59. (MIRA 13:1)

1. Sverdlovskaya mel'nitsa No.1.
(Ventilation) (Grain--Storage)

VAYSBEN, S. A., jt. au.

TYSHKOVSKII, IA. D.

Sulphuric acid. Moskva, Gosknimtekhizdat, 1934. 99 p. (49-44832)

TP215.T9

1. Sulphuric acid. I. Vaisbein, S. A., jt. au.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3

VAYSBEN, S. A.

The chemical industry to the 17th Congress of the All-Union Communist Party
Bolshevik Moskva, Gos, khim.-tekhn. izd-vo, 1934. 106 p.

Cyr.4 HD307

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3"

KALMYKOV, N.N.; VAYSBEYN, S.A.; BATTIN, I.A., redaktor; SHPAK, Ye.G., tekhnicheskiy redaktor

[Economics of the socialist chemical industry] Ekonomika sotsialisticheskoi khimicheskoi promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1955. 302 p.
(Chemical industries) (MLRA 9:1)

VHYSBEYN, S.G.

VASILENKO, V.Kh., professor (Moscow)

"Diagnosis and therapy of emergency conditions in the clinical treatment of internal diseases." S.G. Vaisbein. Reviewed by V. Kh. Vasilenko. Klin.med. 33 no.5: 91-94 My '55. (MLRA 8:9)
(VAISBEIN, V.Kh) (DIAGNOSIS) (MEDICINE)

VAYSBEYN, S.G.

[Emergency cases in the clinical treatment of internal diseases;
diagnostics and therapy] Neotlozhnye sostoianiia v klinike vnutren-
nikh boleznei; diagnostika i terapie. Izd. 2-e, perer. i dop.
Moskva, Medgiz, 1957. 402 p.
(MEDICINE, INTERNAL)

(MIRA 10:11)

VAYSBEYN, Sof'ya Grigor'yevna; BOGOSLOVSKIY, V.A., red.; SENCHILO,
K.K., tekhn. red.

[Emergency states in the clinical treatment of internal
diseases] Neotlozhnye sostoiania v klinike vnutrennikh bo-
leznei; diagnostika i terapiia. Izd.3., perer.i dop. Mo-
skva, Medgiz, 1962. 376 p. (MIRA 15:9)
(MEDICINE, INTERNAL) (MEDICAL EMERGENCIES)

VAYSBEYN, S.G. (Moskva)

Hemorrhages in diseases of the internal organs. Med. sestra 20
no.4:14-18 Ap '61. (MIRA 14:5)
(HEMORRHAGES) (VISCERA—DISEASES)

VAYSBLAT, A.S.; DZHUMAMBAYEVA, A.A.; LIVANSKAYA, N.N.

Treatment of trachoma in Tajikistan with the new preparation
dibiomycin. Antibiotiki 7 no.9:829-832 S '62. (MIRA 15:12)

1. Kafedra mikrobiologii (zav. - chlen-korrespondent AMN SSSR
Z.V.Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya
vrachey i Respublikanskiy trakhomatoznyy dispanser Ministerstva
zdravookhraneniya Tadzhikskoy SSR.
(TAJIKISTAN—CONJUNCTIVITIS, GRANULAR) (AUREOMYCIN)

KASYMOV, U.; VAYSBLAT, A.S., vrach; ZEL'TSER, N.Ya., vrach

Control of trachoma in Kolkhozabad District. Zdrav. Tadzh. 7
no. 3:17-19 My-Je '60. (MIRA 14:4)

1. Predsedatel' Kolkhozabadskogo rayonnogo ispolnitel'nogo komiteta
(for Kasymov).
(KOLKHOZABAD DISTRICT—CONJUNCTIVITIS, GRANULAR)

VAYSBIAT, A.S.

Effect of a 1% emulsion of synthomycin on the conjunctival flora.
in trachoma. Zdrav. Zdrav. 3 no.1:19-21 Ja-F '56. (MIRA 12:7)

1. Iz Respublikanskogo trakhomatognogo dispansera.
(CONJUNCTIVITIS, GRANULAR)
(CHLOROMYCETIN)

2329 Vaysblat, S. N.

Provodnikovoye Obezpoli-Vanive V Khirurgii Zubov I Chelyustey. B-E Pererabot
I Dop. IZD., Kiev, Gosmedizdat USSR, 1954. 290 s. s Ill.; 2L. Ill. 23sm.
8.000 EKZ. 10r 60k. V Per.- Bibliogr: s. 274-86-
(54-56513)

VAYSEBLAST, S.N., professor, zasluzhennyy deyatel' nauki; NOVIK, I.O.,
doktoren (Kiyev)

Development and present state of Stomatology in Ukraine. Stomatologija no.4:3-8 Jl-Ag '54.
(DENTISTRY,
in Russia) (MLRA 7:9)

VAYSBLAT, A.S.

Affecting the process of color sensation by hypnotism. Trudy AN Tadzh.
SSR. 40:159-162 '55. (MIRA 9:10)

1. Iz Respublikanskogo trakhematoznego dispensera Tadzhikskoy SSR.
(HYPNOTISM) (COLOR SENSE)

VAYSBLAT, A.S.

Eliminating the pain syndrome in iridocyclitis and glaucoma by hypnotic suggestion. Trudy AN Tadzh. SSR 40:169-171 '55. (MIRA 9:10)

1. Iz Respublikinskogo trakhomatoznogo dispansera Tadzhikskoy SSR.
(GLAUCOMA) (EYE--DISEASES AND DEFECTS) (HYPNOTISM)

USSR/Pharmacology. Toxicology. Antibiotics.

V

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 103002

Author : Vaysblat, A. S.

Inst : -

Title : The Application of a New Antibiotic-Terramycin
For Treatment of Trachoma.

Orig Pub: Zdravookhr. Tadzhikistana, 1958, No. 2, 37-39

Abstract: No abstract

Card 1/1

40

VAYSBLAT, I.N., assistant (Kiyev)

Diagnosis of cysts of the mandible. Probl. chel.-lits. Khir.
no.1:187-194 '65. (MIRA 18:10)

SOLNTSEV, A.M.; VAYSBLAT, I.N.

Medical procedure in the case of unintentional opening of the antrum.
Probl. stom. 5:260-267 '60. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut usovershenstvovaniya vrachey.
(ANTRUM—SURGERY)

VAYSHLAT, I.N. (Kiyev)

Treatment of maxillary cysts. Probl. stom. 6:198-205 '62.
(MIRA 16:3)
(JAWS--TUMORS) (CYSTS)

VAYSBLAT, S. N.

VAYSBLAT, S. N. "Problems of anesthesia in the surgery of the teeth and jaws", Vracheb. delo, 1948, No. 12, paragraphs 1059-62.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

VAYSBLAT, S.N., professor, zasluzhennyy deyatel' nauki (Kiyev)

Extraoral mandibular anesthesia and its significance in stomatologic practice. Stomatologija no.6:29-31 '53.
(MLRA 7:1)
(Anesthesia in dentistry)

VAYSBLAT, S.N., professor, zasluzhennyy deyatel' nauki; DATSENKO, M.F.,
~~redaktor~~; RAYZ, A.L., tekhnicheskij redaktor.

[Conduction of anesthesia in dental and jaw surgery] Provodniko-
voe obezpolivanie v khirurgii zubov i cheliuskei. 6-e perer. i
dop. izd. Kiev, Gos.med.izd-vo USSR, 1954. 288 p. (MIRA 8:5)
(Anesthesia in dentistry)

VAYSBLAT, S.M., professor, zasluzhennyj deyatel' nauki (Kiyev)

Orbital approach in anesthesia of the foramen ovale. Stomatologija
no.1:38-40 Ja-F '55. (MLRA 8:5)
(ANESTHESIA, REGIONAL,
foramen ovale, orbital approach)
(DENTISTRY, OPERATIVE, analgesia and anesthesia,
foram ovale anesth., orbital approach)

VAISBLAT, S.N.

LUKOMSKIY, I.G., professor.

"Conduction anesthesia in surgery of the teeth and jaws. S. N.
Vaisblat. Reviewed by I.G.Lukomskii. Stomatologija no.3:57
My-Je '55. (MLRA 8:9)
(VAISBLAT, S.N.) (ANESTHESIA IN DENTISTRY)

VAYSOLAT, S.N., professor, zasluzhennyy deyatel' nauki USSR (Kiyev)

Suprazygomatic, so-called temporal pathways of conduction anesthesia
of the mandibular and maxillary nerves. Stomatologija no.5:28-31
(MIRA 9:2)
S-0 '55.

(ANESTHESIA, REGIONAL,
mandibular & maxillary nerves, suprazygomatic temporal
methods)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3

VAYSBLAT, S.N., zasluzhennyy deyatel' nauki, professor (Kiyev)

Orbital path of suborbital anesthesia. Stomatologija 35 no.3:17-18
(MLRA 9:9)

My-Je '56.
(LOCAL ANESTHESIA)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3"

VAYSBLAT, S.N., zasluzhennyy deyatel' nauki, professor (Kiyev)

Features of using local anesthesia in pediatric stomatological
practice. Vrach.delo no.8:839-843 Ag '57. (MLRA 10:8)
(ANESTHESIA IN DENTISTRY)
(PEDIATRIC ANESTHESIA)

VAYSBLAT, S.N. (Kiyev)

Degree to which curettage of a periapical inflammatory focus is
necessary following extraction of a tooth in a periapical chronic
periodontitis. Probl. stom. 5:205-207 '60. (MIRA 15:2)
(TEETH-DISEASES) (DENTISTRY, OPERATIVE)
(TEETH-EXTRACTION)

VAYSHLAT, S.N., prof. (Kiev)

Surgical treatment in periodontosis. Probl. stom. 4:305-310 '58.
(MIRA 13:6)

(GUMS—SURGERY)

VAYSELAT, S.N. (Kiev)

Chronic odontogenic osteomyelitis of the jaw. Probl.stom. 6:
(MIRA 16:3)
209-213 '62.
(OSTEOMYELITIS) (JAWS—DISEASES) (TEETH—DISEASES)

VAYSBLAT, S.N. (Kiev)

Progress in local anesthesia in stomatology. Probl. stom. 6:332-
337 '62. (LOCAL ANESTHESIA) (STOMATOLOGY) (MIRA 16:3)

VAYSBLAT, S.N., prof. (Kiyev)

Neuralgia of the glossopharyngeal nerve and its removal by
means of stem alcoholization. Kaz. med. zhur. no. 4:68-69
(MIRA 13:8)
Jl-Ag '60.
(GLOSSOPHARYNGEAL NERVE--DISEASE)
(ALCOHOL--THERAPEUTIC USE)

VAYSBLAT, S.N., prof., zasluzhennyj deyatel' nauki (Kiyev)

Exact and diffuse methods of conduction anesthesia in the maxillofacial region. Vrach.delo no.12:1297-1299 D '59.
(MIRA 13:5)

(LOCAL ANESTHESIA)

VAYSHLAT, Solomon Naumovich, zasl. deyatel' nauki USSR, prof.;
GINZBURG, I.S., red.; BYKOV, N.M., tekhn. red.

[Local anesthesia for operations on the face, the jaws, and
the teeth] Mestnoe obezbolivanie pri operatsiiakh na litsse,
cheliustiakh i zubakh. Kiev, Gosmedizdat USSR, 1962. 468 p.
(MIRA 16:3)

(LOCAL ANESTHESIA) (FACE-SURGERY)
(JAWS--SURGERY) (ANESTHESIA IN DENTISTRY)

15065

VAYSBLEKH, M.

USSR/Leather Plants 4414.0500
Textile Plants 4415.0600
Labor 5400.

Oct 1947

"Incorporation of Stakhanovite Methods in Enterprises
of USSR," M. Vaysblekh, 2 p

"Legkaya Prom" Vol VII, No 10

Labor production plan fulfilled 100% during first half
of 1947. General description of changes in machinery
in following factories: Kiev shoe factory No 1, Dne-
propetrovsk shoe factory No 9, Kharkov shoe factory No
5, Odessa saddlery and equipage factory, Kiev heel
factory, Kremenchug leather plant No 13, Kiev knitwear
factory imeni R. Lyuksemburg, Kharkov stocking factory,
and L'vov knitwear factory.

15065

LC

VAYSBLIT, M.B., inzh.

Expand and improve the selection of wool fabrics. Tekst.prom.
19 no.10:16-19 O '59. (MIRA 13:1)

1. Nachal'nik otdela sherstyanoy promyshlennosti Vsesoyuznogo
instituta assortimenta legkoy promyshlennosti i kul'tury odezhdy.
(Woollen and worsted manufacture)

VAYSBORD, E.M. (Moskva)

Approximate method for optimum control synthesis. Avtom. i telem., 24
no.12:1626-1632 D '63. (MIRA 17:1)

VAYSEBORD, E. M. Cand Phys-Math Sci -- (diss) "On the existence of periodic solutions in certain systems of differential equations of the third and fourth order, and on the behavior of solutions of differential equations systems in the ^{vicinity} ^{special} neighborhood of a singular point." Mos, 1958. 8 pp
(Mos Order of Lenin and Order of Labor Red Banner State Univ im M. V.
150 copies
Lomonosov) (KL, 52-58, 97)

VAYSBORD, E.M.

Existence of a periodic solution for nonlinear equations of the
third and fourth orders. Nauch.dokl.vys.shkoly; fiz.-mat.nauki
no.3:10-13 '59. (MIRA 13:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Differential equations)

16(1)

AUTHOR: Vaynsbord, E.M.

SOV/140-59-4-6/26

TITLE: On the Existence of a Periodic Solution and on the Large of
the Solutions of a System of Differential Equations of Third
Order

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1959,
Nr 4, pp 38 - 49 (USSR)

ABSTRACT: Let the system

$$(1) \dot{x} = f_{11}(x) + f_{12}(y) ; \dot{y} = f_{23}(z) ; \dot{z} = f_{31}(x) + f_{32}(y) + f_{33}(z)$$

be given, where all the f_{ik} are continuously differentiable.

Theorem: Let

a) $f_{ik}(0) = 0$

b) $f'_{11}(x) < 0, f'_{31}(x) < 0, \lim_{|x| \rightarrow \infty} f'_{i1}(x) = -\infty, i = 1, 3$

c) $0 < f'_{12}(y) < c, f'_{23}(z) > 0, |f'_{23}(z)| \leq a|z|$

$0 < f'_{32}(y) < m, f'_{33}(z) < 0, q|z| < f'_{33}(z),$

Card 1/3

Boundedness in the / Sov/140-59-4-6/26
On the Existence of a Periodic Solution and on the Large of the Solutions of a System of Differential Equations of Third Order

whereby :

from $\lim_{y \rightarrow +\infty} |f'_{32}(y)| < +\infty$ it is assumed to follow
 $\lim_{y \rightarrow +\infty} f'_{32}(y) = 0$

or from $\lim_{y \rightarrow -\infty} |f'_{32}(y)| < +\infty$ it is assumed to follow
 $\lim_{y \rightarrow -\infty} f'_{32}(y) = 0$

d) on $f'_{31}(x) + f'_{32}(y) = 0$ it is assumed to be

$$f'_{12}(y) - \frac{f'_{11}(x)}{f'_{31}(x)} f'_{32}(y) > \gamma > 0$$

$$e) \quad 0 < \alpha < \frac{f'_{11}(x)}{f'_{31}(x)}$$

Card 2/3

On the Existence of a Periodic Solution and on the SOV/140-59-4-6/26
Boundedness in the Large of the Solutions of a System of Differential
Equations of Third Order

$$f) \frac{ca}{\lambda q^2} < 1$$

$$g) f'_{23}(0) \left(f'_{33}(0)f'_{32}(0) + f'_{31}(0)f'_{12}(0) \right) - f'_{11}(0)f'_{33}(0) \\ \cdot \left(f'_{11}(0) + f'_{33}(0) \right) < 0.$$

Then (1) possesses at least one periodic solution. All solutions are bounded in the large for $t \rightarrow +\infty$.
Pliss, Skachkov and Tuzov are mentioned in the paper.
There are 10 references, 7 of which are Soviet, 2 American,
and 1 Italian.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: May 30, 1958

Card 3/3

L 65252-65

ACCESSION NR: AP5021851

UR/0260/65/000/004/0052/0059

AUTHOR: Vaysbord, E. M. (Moscow); Rozenshteyn, G. Sh. (Moscow)

37

TITLE: "Life"-time of stochastic automata

13

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1965, 52-59

TOPIC TAGS: stochastic process, computer simulation, nervous system, automaton

ABSTRACT: The usual investigations of models of biological control systems cover stable systems (e.g., homeostats) or nervous nuclei. Another interesting model can be established by studying unstable systems, i.e., systems which in an arbitrary stationary external medium can make a fast transition into one of the dangerous (catastrophic) states. The reasonable task for such types of systems is to search for a medium within which the lifetime of the normal (favorable) state is as long as possible. Such a problem is similar to the reliability problem in technology. The authors present the mathematical formulation of the model of an unstable system, and discuss the problem of maximizing the lifetime of such an unstable stochastic automaton by choosing an optimum initial function of the device. The method of successive approximations proposed for the calculation of the optimum function can be easily carried out on electronic computers using dynamic programming.

The convergence of the mathematical procedure is also given. "The authors thank

Card 1/2

L 65262-65

ACCESSION NR: AP5021851

D. B. Yudin and M. I. Tsetlin for valuable remarks contributing to the refinement
of the paper." Orig. art. has: 37 formulas and 4 tables.

ASSOCIATION: None

SUBMITTED: 30 March 65

ENCL: 00

SUB CODE: LS, DP

NO REF Sov: 002

OTHER: 002

Card 2/2

16.340031910
6/039/62/056/001/002/003
B112/B138

AUTHOR: Vaynshteyn, E. M. (Moscow)

TITLE: Existence of a periodic solution to a non-linear third-order differential equation

PERIODICAL: Matematicheskiy sbornik, v. 56(98), no. 1, 1962, 43-58

TEXT: The author demonstrates the existence of a periodic solution to the system: $dx_1/dt = x_2 - g_1(x_1)x_1$, $dx_2/dt = x_3 - g_2(x_1)x_1$, $dx_3/dt = -g_3(x_1)x_1$. It is assumed that $g_i(x) = G_i(x)/x$ for $x \neq 0$ and $g_i(x) = G_i'(x)$ for $x = 0$, where the $G_i(x)$ are functions for which theCauchy's problem of the equation $d^3x/dt^3 + d^2G_1(x)/dt^2 + dG_2(x)/dt \cdot g_3(x) = 0$ is unambiguously solvable for arbitrary initial conditions. Additionalassumptions: a) $G_1(x) > 0$, b) existence of $\lim_{|x| \rightarrow \infty} g_i(x) = g_i(\infty) > 0$,c) $g_1(0)g_2(0) < 0$, $g_1(\infty)g_2(\infty) > g_3(\infty)$.

Card 1/3

Existence of a periodic solution ...

31910
S/039/62/056/001/002/003
B112/B138

d) $g_1(x_0) > \frac{(\sqrt{g_3(x_0)} + \sqrt{g_2(x_0) + g_1^2(x_0)}) (g_1^2(x_0) + g_1(x_0) + 1 + \sqrt{(g_1(x_0) + 1)^2 + g_2(x_0)})}{\sqrt{g_3(x_0)} (g_1^2(x_0) + g_1(x_0))} \Delta,$

$$\Delta = \max(\Delta_1, \Delta_2, \Delta_3), \quad \Delta_i = \sup_{-\infty < x < +\infty} |g_i(x_0) - g_i(x)|.$$

e) $(g_1^2(x_0) g_1(0) + g_3(0))^2 >$

$$> \max \left[(-g_2(x_0) g_1(0) + g_3(0))^2, \left(\frac{g_3(x_0)}{g_2(0)} g_3(0) - g_3(0) \right)^2 \right] + \\ + g_2(x_0) \frac{g_3^2(0)}{g_1^2(0)} \left(g_1(0) - \frac{g_3(0)}{g_2(0)} \right)^2,$$

f) $g_1^2(x_0) > g_2(x_0),$

g) $g_1(x_0) > g_1(0).$

An analogous theorem is proved for the case of a non-linear fourth-order equation. There are 2 figures and 5 references, 2 Soviet

Card 2

Existence of a periodic solution ...

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S/039/62/056/001/002/003
B112/B138

and 1 non-Soviet. The reference to the English-language publication reads as follows:L. L. Rauch, Oscillation of a third-order non-linear autonomous system. Contributions to the theory of non-linear oscillations, Annals of mathem. studies, No. 20 (1950), 39 - 89.

SUBMITTED: January 21, 1960

X

Card 3/3

VAYSBORD, E.M. (Moskva); ROZENSHTEYN, G.Sh. (Moskva)

"Life" of stochastic automata. Izv. AN SSSR. Tekh. kib. no.4;
52-59 Jl-Ag '65. (MIRA 18:11)

ACC NR: AP6024361

SOURCE CODE: UR/0280/66/000/002/0045/0048

AUTHOR: Vaysbord, E. M.; Rozenshteyn, G. Sh. (Moscow)

ORG: none

TITLE: On a method of constructing optimal environments for unstable automata

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1966, 45-48

TOPIC TAGS: automation, electronic circuit environment, optimal control, dynamic programming, dynamic stability

ABSTRACT: The optimal environment in this case is construed as the environment which maximizes the lifetime of unstable stochastic automata. By analogy with the behavior of the higher animals, which is characterized by a regular alternation of periods of activity and periods of rest, the behavior (lifetime) of an unstable automaton may be optimized if for f time units it functions in spontaneous environments and for g time units, in an environment specially designed to prolong the automaton's life, after which the automaton again functions in a spontaneous environment for f cycles. In this connection, the authors propose a matrix method of computing the optimal environment, as based on the dynamic programming theory.

Card 1/2

ACC NR: AP6024361

Essentially, this means that for an automaton which follows a fixed matrix P of transition probabilities for f cycles and a "self-selected" transition matrix for g cycles, the optimal -- from the standpoint of maximizing the automaton's lifetime -- matrix Q can be found by determining the optimal mapping of $\varphi_0(A_i)$ of each state A_i ($i = 1, \dots, m$) onto one of the set of states at which the automaton may arrive in the course of g cycles. This mapping can be determined by means of the method of successive approximations based on the ideas of dynamic programming (Bellman, R. Dinamicheskoye programmirovaniye. Izd-vo inostr. lit. 1960 [Russian translation]). Orig. art. has: 10 formulas.

SUB CODE: 09, 12 / SUBM DATE: 13Jul65 / ORIG REF: 001 / OTH REF: 001

Conf 2/2

1. KOCHNEV, V. I.: VAYSBORD, M. A.
2. USSR (600)
4. Cranes, Derricks, Etc.
7. Reconstruction of the boom of a portal crane. Rech.transp., 12, no. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VAYSBORD, N.A.; GRINBERG, A.A., kand. med. nauk

Pelvic arteriography; a review of literature. Akush. i gin.
40 no.2:84-89 Mr-Apr '64. (MIRA 17:11)

1. Gorodskaya klinicheskaya bol'nitsa No.29 imeni Baumana
(vedushchiy khirurg - kand. med. nauk L.M. Shnaper, glavnyy
vrach - kand. med. nauk N.G. Orlov), Moskva.

VAYSBROD, S.A.

YAKUBOV, V.F., inzh.; VAYSBROD, S.A., inzh.; KUDRYASHOV, S.A., inzh.

New grounding system for electric installations. Nov. tekh. i pered.
op. v stroi. 20 no.3:27-28 M '58. (MIRA 11:3)
(electric currents--Grounding)

S/084/60/000/03/059/083
D047/D002

AUTHOR: Vaysburd, A., Workshop Superintendent (Bykovo)

TITLE: Spare Parts Can Serve Longer

PERIODICAL: Grazhdanskaya aviatsiya, 1960, Nr 3, p 23 (USSR)

ABSTRACT: The author states that some parts of the ASh-82T engine and Il-14 aircraft could serve longer than the prescribed period i.e. potentially 3000 hours and longer. According to present regulations, the parts have to be changed after a certain period although they may still be good. ✓

Card 1/1

VAYSBURD, A. P.

(5)

Determination of lithium in air. I. I. Paul and A. P. Vaynsburg (Sci. Research Sekt. Inst., Novosibirsk). *Gigiona* i Sekt. 1953, No. 9, 49-50. Li in the air can be detd. colorimetrically according to Nazarenko and Filatova (C.I. 44, 1891) in which the air is treated to give $\text{LiFe}(\text{CN})_6$ insol. in H_2O_2 from which the Fe can be detd. colorimetrically by the $\text{Fe}(\text{CNS})_3$ method. The reaction is sensitive to 0.002 mg. Fe, or 0.000245 mg. Li per 3 ml. At the level of 0.0004-0.0008 mg./l. in the air, the reproducibility of standard samples is within 6-10% relative.

G. M. Kozolapoff

VAYSBURD, A.Ya., inzh.

Increasing the life of iron mill rolls by the use of smaller
diameters. Stal' 21 no.12:1107 D '61. (MIRA 14:12)
(Rolls(Iron mills))

KORBUT, A.A., inzh.; KAMENETSKIJ, L.Ye., kand. ekonom. nauk; VAYSBURD, B.M.,
inzh.

Using linear programming methods in planning the expansion of the Kanak-Achinsk coal basin. Izdat. vys. ucheb. zav., gor. zhurn. 7 no. 6: 48-51 '64.
(MIRA 17/12)

1. Leningradskiy vychislitel'nyy tsentr (for Korbut). 2. Gosudarstvennyy
institut po proyektirovaniyu shakht (for Kamenetskiy, Vaysburd).

8/089/62/013/005/012/012
B102/B104

AUTHORS: Vaysburd, D., Zakharov, Yu.

TITLE: Conference on the problem "Izmeneniye svoystv materialov pod deystviyem izlucheniy" ("Radiation-induced changes in material properties")

PERIODICAL: Atomnaya energiya, v. 13, no. 5, 1962, 497-498

TEXT: The conference was held in November 1961 at the Tomskiy politekhnicheskiy institut (Tomsk Polytechnic Institute) (TPI). Studies at this institute, at the Sibirskiy fiziko-tekhnikheskiy institut (Siberian Physicotechnical Institute)(SFTI), and at the Tomskiy gosudarstvennyy universitet (Tomsk State University) (TGU) were reported and discussed. Scientists attended from Moscow, Irkutsk, Novosibirsk, Tashkent and Tbilisi. The main fields covered were: Determination of radiation resistance in dependence on the chemical composition of the material; physics of radiation defects and microprocesses; chemical radiation effects; apparatus for investigating radiation effects. The following scientists gave reports: A. A. Vorob'yev (TPI), radiation effects

Card 1/3

S/089/62/013/005/012/012

B102/B104

Conference on the problem ...

in ion crystals; A. V. Kuz'mina (TPI), calorimetric determination of energy stored in gamma-irradiated NaCl (1.47 cal/g); P. A. Savintsev, I. T. Berzina, A. A. Botaki, A. F. Naumov (TPI), irradiation-induced changes in physical properties of ion crystals; A. A. Vorob'yev, Ye. K. Zavadovskaya (TPI), radiation resistance of ion crystals as dependent on structure and composition; S. K. Salo (TPI), F-center concentration in X-ray-irradiated alkali halogenides; I. Ya. Melik-Gaykazyan, L. V. Grigoruk, M. I. Ignat'yeva (TPI), X-ray induced F-center formation of alkali halogenides as dependent on the bivalent-metal impurity content; B. V. Budylin and A. A. Vorob'yev (TPI), spontaneous F-center formation in neutron-irradiated and annealed ion crystals; A. K. Berzin, S. L. Kashchuk (TPI), β -radiation attenuation as reduced by small doses of neutron irradiation; M. A. Krivov, S. V. Molyanov, A. P. Vyatkin, V. I. Domnin, S. V. Mal'tsev, B. V. Mashkova (SFTI), effect of X- and γ -rays on semiconductor properties; V. M. Nesterov, Ye. S. Nesmelova, T. Kh. Mikhaylova, N. I. Ol'shanskaya (SFTI), radiation effects on crystalline polymers, rubbers, resin, and PVC plastics; V. V. Vorob'yev (TPI), radiation effects in ion crystals (review); V. V. Boldyrev, A. N. Oblivantsev, effect of previous X-ray irradiation on the thermal

Card 2/3

S/089/62/013/005/012/012

B102/B104

Conference on the problem ...

disintegration of permanganates; V. V. Boldyrev, Yu. A. Zakharov, V. I. Yeroshkin, effect of impurities on thermo-, photo-, and radiation resistance of ionic salts; L. S. Sokolov (TPI), output and measurement of a cyclotron beam for material irradiation; B. A. Kononov and V. I. Rudenko (TPI), new design of apparatus for measuring the betatron-electron absorption coefficient in crystals; B. A. Kononov, S. A. Kuznetsov, Yu. P. Tsurukin (TPI), measurements of electric conductivity of irradiated samples in vacuo (10^{-5} mm Hg, -150-+150°C).

Card 3/3

ACC NR: AR6035057

SOURCE CODE: UR/0058/66/000/008/E090/E090

AUTHOR: Vaysburd, D. I.; Melik-Gaykakazyan, I. Ya.

TITLE: Kinetic equation for the accumulation of F-centers in alkali-halide monocrystals irradiated by protons

SOURCE: Ref. zh. Fizika, Abs. 8E686

REF SOURCE: Iz. Tomskogo politekhn. in-ta, v. 138, 1965, 3-12

TOPIC TAGS: kinetic equation, crystal, f center, f center accumulation, M center, R center, monocrystal, alkali halide, proton irradiation

ABSTRACT: A study was made of the kinetics of the accumulation of F-, M-, and R-centers in alkali-halide monocrystals irradiated by protons with an energy of 5 Mev at room temperature. The depth of penetration of protons was determined from the thickness of the colored layer. For all the investigated crystals the concentration of M-centers was proportional to the square of the concentration of F-centers in the region of relatively small F-center concentration. An increase in the intensity of irradiation decreases the effectiveness of $F \rightarrow M$ conversion.

Card 1/2

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3

In addition to the kinetics of F-center accumulation, LiF monocrystals were studied for the kinetics of the accumulation of complex electron coloration centers upon irradiation by protons. L. Devchenko. [Translation of abstract] [SP]

SUB CODE: 20/

Card 2/2

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859210002-3"

*REF ID: A6510*S/139/62/000/006/031/032
E039/E435

AUTHORS:

Melik-Gaykazyan, I.Ya., Vaysburd, D.I.

TITLE:

The formation of F-centres in solid solutions of KCl-KBr

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.6,
1962, 174-176

TEXT: Samples of single crystals of KCl-KBr solid solution thickness 0.2 to 0.4 mm are irradiated with X-rays (Mo anode, 15 mA, 50 kV) filtered through Zr filter 0.2 mm thick at a dose rate of 17.0 r/min. The composition is determined from the position of the F-band maximum in the absorption spectrum. Curves showing the dependence of the F-centre density with exposure have a fast nonlinear rise followed by a slower linear rise. The former is assumed to be due to anion vacancies and the latter F-centres formed from radiation generated vacancies. In quenched samples the F-centre density is always higher than for freshly grown samples. The rate of formation of defects must depend directly on the X-ray absorption coefficient and inversely on the energy of the crystal lattice. Results of experiments on irradiation of samples up to a dose of 40800 r show that maximum F-centre density $\sim 4.3 \times 10^{16} \text{ cm}^{-3}$ is achieved for pure KCl and that the

Card 1/2

The formation of F-centres, ...

S/139/62/000/006/031/032
E039/E435

density falls off steadily as the KBr concentration is increased to $\sim 0.7 \times 10^{16} \text{ cm}^{-3}$ for 4 mole % KCl. In addition, the slope of the linear part of the F-centre build up curve decreases as the KBr content increases, and in the case of 4 mole % KCl shows that saturation is attained. It is assumed that, under the conditions of these experiments, with the increase in KBr content the rate of destruction of F-centres by X-rays increases faster than the rate of their formation. There are 2 figures.

ASSOCIATION: Tomskiy politekhnicheskiy institut imeni S.M.Kirova
(Tomsk Polytechnic Institute imeni S.M.Kirov)

SUBMITTED: November 14, 1961

Card 2/2

L 62708-65 EPC(b)-2/EPR(1)/EPR(n)/EPR(b) T/EPR(t) PI-4 LIP(c) V/ID/JG
ACCESSION NR: APSC1978

PL 17/18/0017 27 140,1200

AUTHOR: Vaysburd, D. I.; Melik-Gaykazyan, I. Ya.

TITLE: Radiation kinetics of accumulation of electron centers in alkali halide crystals² in relation to the distribution of absorbed and stored radiation energy based on localization multiplicities

SOURCE: Teoreticheskaya i eksperimental'naya khimiya, v. 1, no. 2, 1965, 190-200

TOPIC TAGS: alkali halide, crystal, color center, lithium fluoride, proton irradiation, F center, radiation damage, radiation effect, alkali halide

ABSTRACT: It was established experimentally that during the irradiation of lithium fluoride single crystals with 1.1-Mev protons, the kinetics of accumulation of F-centers is represented by a curve with a maximum, and the efficiency of the F-M radiochemical reaction increases with the dose and total concentration of F-centers in the isolated and associated states. The following irradiation conditions are responsible for the increase in the width of the F-center distribution: 1) statistical distribution of F-centers over multiplicity F_1 , enters and 2) statistical distribution of the dose over the localization multiplicity. A kinetic equation

Card 1/2

L 62708-65

ACCESSION NR: AP5019730

for the accumulation of the stored energy with increasing dose is derived which accounts for the experimentally observed complex character of the kinetics of radiation accumulation of F-centers in LiF. It is shown how 1) the coalescence volume of an F-center relative to the $F + M$ reaction and the coalescence volume of an M-center relative to the $M, F + R$ reaction and 2) the energy localization volume of a single proton in the crystal can be determined from the kinetics of accumulation of F- and M-centers. "We thank A. A. Lopatin for reviewing the results of this work." Orig. art. has: 6 figures and 15 formulas.

2

[1b]

ASSOCIATION: Tomskiy politekhnicheskiv institut (Tomsk Polytechnic Institute)

SUBMITTED: 23Oct64

ENCL: 00

SUB CCDE: SS, MP

NO REF SOV: 002

OTHER: 005

ATD PRESS: 4064

xc
Card 2/2

ACC NR: AP6002416

SOURCE CODE: UR/0020/65/165/005/1029/1032

AUTHOR: Vaysburd, D. I.; Malik-Gaykazyan, I.Ya.

ORG: Tomsk Politechnical Institute (Tomskiy politekhnicheskiy institut im. S.M. Korova

TITLE: Equation for accumulation of radiation electron centers in alkali halide crystals

SOURCE: AN SSSR. Doklady, v. 165, no. 5, 1965, 1029-1032

TOPIC TAGS: alkali halide, defect center, radiation damage, radiation effect,
IRRADIATION, CRYSTAL STRUCTURE ANALYSIS

ABSTRACT: The authors have established in a previous paper (Teoreticheskaya i eksperimental'naya khimiya, 1, 190, 1965) that at room temperature the build-up of F-centers (n_F) in LiF monocrystals can be expressed as a curve with a maximum, and the efficiency of radiochemical coagulation of the F-centers into M-centers (n_M/n_F^2) increases. At a uniform distribution of the dose and in the absence of $M \rightarrow F$ type reverse reactions, such an irreversible process is a build-up of the total concentration of F-centers in single and associated states

$$n = n_F + 2n_{F_2} + 3n_{F_3} + \dots + in_{F_i} + \dots \quad (1)$$

Card 1/2

UDC: 539.293

ACC NR: AP6002416

The distribution of F-centers along multiple F_1 -centers follows Poisson's law. Based on the results of a mathematical argument, the authors conclude that with increase of the dose and the mean multiplicity of localization, the maximum distribution of the irradiated volume decrease and the half-width increases. The irradiated crystal becomes homogeneous and the experimental efficiency of the $F \rightarrow M$ reaction approaches the theoretical efficiency. Orig. art. has: 15 formulas and 2 figures.

SUB CODE: 20 / SUBM DATE: 25Mar65/ ORIG REF: 001/ OTH REF: 004

Card 2/2

L 35326-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JW/JG/GG
ACC NR: AP6026837

SOURCE CODE: UR/0020/66/166/002/0391/0394

AUTHOR: Vaysburd, D.I.; Melik-Gaykazyan, I.Ya.

ORG: Tomsk Polytechnic Institute im. S.M. Kirov

TITLE: Distribution of absorbed and accumulated emission energy with respect to localization multiplicities in a solid

SOURCE: AN SSSR. Doklady, v. 166, no. 2, 1966, 391-394

TOPIC TAGS: proton, lithium fluoride, irradiation, single crystal

ABSTRACT: The authors studied the accumulation of F- and M-centers in proton-irradiated single crystals of lithium fluoride. The study was based on the

fact that the depth of penetration of protons into the crystal, and therefore the thickness of the color layer, depends on the proton energy. The accumulation of F-centers was studied to concentrations of approximately $5 \cdot 10^{19} \text{ cm}^{-3}$. The effectiveness of the F-M reaction (which is defined as $K_M W_M / (K_F W_F)$, where K_F and K_M are the coefficients of absorption at the maxima for the F- and M-bands respectively, and W_F and W_M are the half-widths of the corresponding bands) decreases with the radiation dose in the region where accumulation of R-centers is insignificant. The effectiveness of this reaction decreases with a reduction in proton energy and shows satisfactory correlation with the depth of proton penetration for a number of alkali halide crystals. It was assumed that overlapping of proton tracks in the crystal is responsible for these

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effects. Interaction between the solid and each individual quantum or particle is accompanied by absorption of a certain average energy $\epsilon = D/j$, where D is the radiation dose and j is the number of particles colliding in a unit volume of the target. The energy absorbed from the quantum is concentrated in a localization volume or track which is much less than the volume of the target for most types of radiation. When a solid is irradiated, there is the phenomenon of spatial overlapping of quantum localization regions. This of coincident localization volumes is called the multiplicity of localization at the point of overlap. The authors determined the distribution of the irradiated volume with respect to localization multiplicities of absorbed radiation energy. It is shown that the effectiveness of the F₂M reaction is higher for crystals in which the volume of the track is greater for irradiation of crystals with various chemical compositions. The track volume is greater for crystals in which the stopping power is lower. This explains the correlation between reaction effectiveness and depth of proton penetration. It was found from the energy accumulated in F-centers, assuming a cylindrical track, that the diameter of a 2.7 Bev proton track is 35 Å. This article was presented by V.N. Kondrat'yev on 23 March 1965. The authors thank A.A. Vorob'yev for discussion of the results. Orig. art. has: 3 figures and 5 formulas./JPRS, 36,4557

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59

AUTHOR: Vaysburd, D. I.

TITLE: Law of distribution of absorbed and stored radiation energy relative to the multiplicities of localization in a solid

SOURCE: Ref. zh. Fizika, Abs. 5D441

REF. SOURCE: Izv. Tomskogo politekhn. in-ta, v. 138, 1965, 13-19

TOPIC TAGS: color center, statistic distribution, solid state, light absorption, light energy, crystal defect, radiation damage

ABSTRACT: Starting from the assumption that the possibility of appearance of high local concentrations of color centers is inherent in the distribution of the absorbed and stored energy in the solid, the authors solved the problem of the probability distribution of the irradiated volume relative to the multiplicity of localization (ML) of the energy. By ML is meant the number of coinciding elementary localization volumes, that is, volumes in which the energy of one absorbed particle or quantum is distributed. The obtained laws make it possible to explain the uneven distribution of radiation defects and its variation with increasing radiation dose for crystals that have different chemical compositions and are exposed to different types of radiations. [Translation of abstract]

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VAYSBURD, I.A.; ZADVORNYAK, P.V.

Clinical and electrocardiographic observations during the 1957
influenza outbreak in Stalinabad. Zdrav. Tadzh. 6 no.6:19-22
'59. (MIRA 13:4)

1. Iz knafedry infektsionnykh bolezney (zav. - dotsent D.M. Khashimov)
Stalinabadskogo medinstituta im. Abuali ibni Sino.
(STALINABAD--INFLUENZA) (ELECTROCARDIOGRAPHY)

VAYSBURD, I.A.

Infection with the cutaneous form of anthrax following accidental
subcutaneous injection of TSenkovskii's second vaccine. Zdrav.
Tadzh. 7 no.1:40-43 Ja-F '60. (MIRA 13:5)

1. Iz Stalinabadskoy gorodskoy infektsionnoy bol'nitsy.
(ANTHRAX)

SHAPIRO, S. E., KUTCHAK, S. N., VAYSEURD, I. A.

Fever

Hemorrhagic fever. Fel'd.i akush. No.9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

...
...

OYVIN, V.I.; KORETSKAYA, L.S.; KHASHIMOV, D.M.; VAYSBURD, I.A.

Distribution of antibodies in protein fractions of blood plasma of patients having acute dysentery [with summary in English]. Vop.med.khim. 3 no.3:190-194 My-Je '57. (MLRA 10:8)

1. Stalinabadskiy institut epidemiologii i gigiyeny, kafedra patofiziologii i kafedra infektsionnykh bolezney Stalinabadskogo meditsinskogo instituta imeni Avitsenny
(DYSENTERY, BACILLARY, immunol.)

antibody distribution in blood protein fractions (Bus))